# This Page Is Inserted by IFW Operations and is not a part of the Official Record

## BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

### IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.



## UNITED STATE DEPARTMENT OF COMMERCE United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	АТТ	ORNEY DOCKET NO.
er Fores		e, i se di <del>kum</del>		
		· ¬	EXA	AMINER
		##12/0712 # 1/4	ART UNIT	PAPER NUMBER
		VE.	An our	5
			DATE MAILED:	07/12/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

<i>i</i>						
	Application No.	Applicant(s)				
Office Action Summary	09/724,860	WELCHER ET AL.				
•	Examiner	Art Unit				
	Janet L Andres	1646				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on	_:					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Thi	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-56</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) ☐ Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8)⊠ Claims 1-56 are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are objected to	by the Examiner.					
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. § 119						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).						
Attachment(s)						
<ul> <li>15) Notice of References Cited (PTO-892)</li> <li>16) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>17) Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ul>	19) 🔲 Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				

Art Unit: 1646

### **DETAILED ACTION**

#### Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-8, 10, 11, and 43-45, drawn to polynucleotides and means of expression, classified in class 435, subclasses 69.51, 320.1, and 325, and class 536, subclass 23.52.
- II. Claims 9, 13-17, 37-42, 46, and 47, drawn to polypeptides, classified in class 530, subclass 351.
- III. Claim 12, drawn to a method of determining inhibition, classified in class 435, subclass 7.1.
- IV. Claims 18-32, 34, and 35, drawn to selective binding agents, classified in class530, subclasses 388.1 and 389.1.
- V. Claim 33, drawn to a method of treatment with a selective binding agent, classified in class 424, subclass 158.1.
- VI. Claim 36, drawn to a method of detection, classified in class 435, subclass 7.1.
- VII. Claims 48 and 49, drawn to a method of treatment by a polypeptide, classified in class 424, subclass 85.4.
- VIII. Claim 50, drawn to a method of diagnosis, classified in class 424, subclass 9.1.
- IX. Claim 51, drawn to a device, classified in class 424, subclass 93.1.
- X. Claims 52 and 53, drawn to a method of identifying a binding compound, classified in class 435, subclass 7.1.

Art Unit: 1646

- XI. Claim 54, drawn to a method of gene therapy, classified in class 435, subclass 455.
- XII. Claim 55, drawn to a transgenic animal, classified in class 800, subclass 8.
- XIII. Claim 56, drawn to a method of use of a transgenic animal, classified in class 800, subclass 3.

The inventions are distinct, each from the other because of the following reasons:

The polynucleotides of Invention I are not related to the polypeptides of Invention II.

They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The polynucleotides of Invention I are distinct from the method of Invention III because they have other uses, such as the production of protein.

The polynucleotides of Invention I are not related to the binding agents of Invention IV.

They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The polynucleotides of Invention I are not related to the methods of Inventions V-VIII.

They can not be used in or detected by these methods.

The polynucleotides of Invention I are distinct from the device of Invention IX because they have other uses, such as the production of protein.

The polynucleotides of Invention I are not related to the method Invention X. They can not be used in or detected by this method.

The polynucleotides of Invention I are distinct from Inventions XI-XIII because they have other uses, such as the production of protein.

Art Unit: 1646

The polypeptides of Invention II are not distinct from the method of Invention III. They have other uses, such as the generation of antibodies.

The polypeptides of Invention II are not related to the binding agents of Invention IV.

They differ structurally and functionally, can not be used together or interchangeably, and have non-coextensive searches and considerations.

The polypeptides of Invention II are not related to the method of Invention V. They can not be used in this method.

The polypeptides of Invention II are distinct from the method of Invention VI because they can be detected in other ways, such as activity assays.

The polypeptides of Invention II are distinct from the method of Invention VII because they have other uses, such as the generation of antibodies.

The polypeptides of Invention II are distinct from the method of Invention VIII because they can be detected in other ways, such as activity assays.

The polypeptides of Invention II are not related to the device of Invention IX. They differ structurally and functionally and have non-coextensive searches and considerations.

The polypeptides of Invention II are distinct from the method of Invention X because they have other uses, such as the generation of antibodies.

The polypeptides of Invention II are not related to Inventions XI-XIII. They can not be used in or detected by any of these Inventions.

The method of Invention III is distinct from the binding agents of Invention IV because the binding agents can be detected in other ways, such as immunoprecipitation assays.

Art Unit: 1646

The method of Invention III is not related to the methods of Invention V-VIII. These methods have different goals, different method steps, and different outcome measures.

The method of Invention III is not related to the device of Invention IX. The method of Invention III can not utilize or detect this device.

The method of Invention III is not related to the method of Invention X. These methods have different goals, different method steps, and different outcome measures.

The method of Invention III is not related to Inventions XI-XIII. The method of Invention III can not be used in or use any of these Inventions.

The binding agents of Invention IV are distinct from the method of Invention V because they have other uses, such as protein purification.

The binding agents of Invention IV are distinct from the method of Invention VI because they have other uses, such as therapeutic uses.

The binding agents of Invention IV are not related to the method of Invention VII. They can not be used in or detected by this method.

The binding agents of Invention IV are distinct from the method of Invention VIII because they have other uses, such as protein purification.

The binding agents of Invention IV are not related to the device of Invention IX. They differ structurally and functionally and have non-coextensive searches and considerations.

The binding agents of Invention IV are distinct from the method of Invention X because they can be identified in other ways, such as activity assays.

The binding agents of Invention IV are not related to Inventions XI-XIII. They can not be used in or detected by any of these Inventions.

Art Unit: 1646

The method of Invention V is not related to the methods of Inventions VI-VIII. These methods have different goals, different method steps, and different outcome measures.

The method of Invention V is not related to the device of Invention IX. The device of Invention IX can not be used in this method.

The method of Invention V is not related to Inventions X-XIII. This method can not use or be used for any of Inventions X-XIII.

The method of Invention VI is not related to the methods of Invention VII and VIII. The methods have different goals, different method steps, and different outcome measures.

The method of Invention VI is not related to the device of Invention IX. The method can not use or detect this device.

The method of Invention VI is not related to the method of Invention X. The methods have different method steps, different goals, and different outcome measures.

The method of Invention VI is not related to Inventions XI-XIII. This method can not use or be used for any of these Inventions.

The method of Invention VII is not related to the method of Invention VIII. These methods have different goals, different method steps, different reagents, and different outcome measures.

The method of Invention VII is not related to the device of Invention IX. The device can be used in or affected by this method.

The method of Invention VII is not related to the method of Invention X. The methods have different goals, different method steps, different reagents, and different outcome measures.

Art Unit: 1646

The method of Invention VII is not related to Inventions XI-XIII. The method can not use or be used for any of these Inventions.

The method of Invention VIII is not related to the device of Invention IX. The method cannot use or detect this device.

The method of Invention VIII is not related to the method of Invention X. The methods have different goals, different method steps, different reagents, and different outcome measures.

The method of Invention VIII is not related to Inventions XI-XIII. The method can not use or be used for any of these Inventions.

The device of Invention IX is not related to the method of Invention X. The device can not be used in or detected by this method.

The device of Invention IX is not related to Inventions XI-XIII. The device can not be used in or with these Inventions.

The method of Invention X is not related to Inventions XI-XIII. The method can not use or be used for any of these Inventions.

The method of Invention XI is not related to Inventions XII and XIII. The method can not be used in or with these Inventions.

The transgenic animal of Invention XII is distinct from the method of Invention XIII because the animal has other uses, such as the study of gene function.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Art Unit: 1646

Because these inventions are distinct for the reasons given above and different searches are required for the different groups, restriction for examination purposes as indicated is proper.

This application contains claims directed to the following patentably distinct species of the claimed invention:

- a) the polypeptides and polynucleotides represented by SEQ ID Nos: 1 and 2.
- b) the polypeptides and polynucleotides represented by SEQ ID Nos: 4 and 5.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

Art Unit: 1646

examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet Andres, Ph.D., whose telephone number is (703) 305-0557. The examiner can normally be reached on Monday through Friday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, Ph.D., can be reached at (703) 308-6564. The fax phone number for this group is (703) 305-3014 or (703) 308-4242.

Communications via internet mail regarding this application, other than those under U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [yvonne.eyler@uspto.gov].

All Internet email communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark Office on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Janet Andres, Ph.D.

June 29, 2001

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600